

CLAIMS

1. A digital communication system comprising:

a transmitter operable to sequentially transmit predetermined format data; and

5 a plurality of receivers each including a data selecting apparatus operable to select required data from received data group and to output selected data,

wherein said transmitter is further operable to transmit data to said receivers in one of a first transmission mode,
10 a second transmission mode and a third transmission mode,

wherein in the first transmission mode, group destination assignment information indicating whether the data is transmitted to a specified receiver of said plurality of receivers, to a group consisting of specified plural
15 receivers, or to all receivers, group specifying information for specifying a receiving group of receiving groups to which the data is to be transmitted, and in-group identification information for identifying a receiver to which the data is to be transmitted, in a receiving group which is specified
20 by the group specifying information, are included in the data, and the group destination assignment information in the first transmission mode indicates that the data is transmitted to a specified receiver of said plurality of receivers,

wherein in the second transmission mode, the group
25 destination assignment information and the group specifying

information are included in the data, and the group destination assignment information and the group specifying information in the second transmission mode indicates that the data is transmitted to a group consisting of specified plural
5 receivers, and

wherein in the third transmission mode, the group destination assignment information is included in the data, and the group destination assignment information in the third transmission mode indicates that the data is transmitted to
10 all receivers or to a group consisting of plural receivers which are specified by the group destination assignment information.

2. The digital communication system of claim 1,
15 wherein said transmitter includes data structuring means for structuring data to be transmitted, and

wherein said data selecting apparatus includes:

parameter storage means for prestoring plural parameters which are to be compared to the group destination assignment
20 information, the in-group identification information, and the group specifying information;

correspondence pattern detecting means for comparing the information stored in the data to the parameters, respectively, to detect correspondence patterns; and

25 output means for selecting the required data according

to the correspondence patterns detected by the correspondence pattern detecting means and outputting the selected data.

3. A transmitter for use with a digital communication system
5 wherein data is structured to be in a predetermined format and to be transmitted to a plurality of receivers, said transmitter comprising:

data structuring means for structuring data to be transmitted in one of a first data transmission mode, a second
10 data transmission mode and a third transmission mode,

wherein in the first transmission mode, group destination assignment information indicating whether the data is transmitted to a specified receiver of said plurality of receivers, to a group consisting of specified plurality
15 receivers, or to all receivers, group specifying information for specifying a receiving group of receiving groups to which the data is to be transmitted, and in-group identification information for identifying a receiver to which the data is to be transmitted, in a receiving group which is specified
20 by the group specifying information, are included in the data, and the group destination assignment information in said first transmission mode indicates that the data is transmitted to a specified receiver of said plurality of receivers,

wherein in the second data transmission mode, the group
25 destination assignment information and the group specifying

information are included in the data, and the group destination assignment information in the second transmission mode indicates that the data is transmitted to a group consisting of specified plural receivers, and

5 wherein in the third data transmission mode, the group destination assignment information is included in the data, and the group destination assignment information in the third transmission mode indicates that the data is transmitted to all receivers.

10

4. The transmitter of claim 3, wherein the group destination assignment information in the first transmission mode includes a specified receiver destination number indicating that the data to be transmitted is destined for a specified
15 receiver when the data to be transmitted is destined for the specified receiver.

5. The transmitter of claim 3, wherein the group destination assignment information in the second transmission mode
20 includes a group destination number indicating that the data to be transmitted is destined for a group, when the data to be transmitted is destined for the group.

6. The transmitter of claim 3, wherein the group destination
25 assignment information in the third transmission mode

includes all specifying numbers indicating that the data to be transmitted is destined for all receivers, when the data to be transmitted is destined for the all receivers.

5 7. The transmitter of claim 3, wherein the group destination assignment information in the third transmission mode includes a special group number indicating that the data to be transmitted is destined for all receivers which belong to a special group, when the data to be transmitted is destined
10 for the all receivers which belong to the special group.

8. A data selecting apparatus adapted to be incorporated in a receiver in a digital communication system, which is operable to be supplied with predetermined format data as
15 inputs and is operable to select required data from an input data group and to output selected data, said apparatus comprising:

parameter storage means for prestoring plural parameters which are to be compared to group destination assignment
20 information in the data indicating whether the data to be transmitted is transmitted to a specified receiver of the plurality of receivers, to a group consisting of specified plural receivers, or to all receivers, group specifying information in the data for specifying a receiving group of
25 receiving groups to which the data is to be transmitted, and

in-group identification information in the data for identifying a receiver to which the data is to be transmitted, in a receiving group which is specified by the group specifying information;

5 correspondence pattern detecting means for comparing the information stored in the data to the parameters, respectively, to detect correspondence patterns; and

 output means for selecting the required data according to the correspondence patterns detected by said
10 correspondence pattern detecting means and outputting the selected data.

9. A digital communication system comprising:

 a transmitter operable to sequentially transmit
15 predetermined format data; and

 a plurality of receivers each including a data selecting apparatus operable to select required data from received data group and to output selected data,

 wherein said transmitter is operable to transmit data
20 to said receivers in one of a first transmission mode, a second transmission mode and a third transmission mode,

 wherein in the first transmission mode, group destination assignment information directing which transmission mode is used among the first transmission mode,
25 the second transmission mode, and the third transmission mode,

to transmit the data, group specifying information for specifying a receiving group of receiving groups to which the data is to be transmitted, and in-group identification information for identifying a receiver in an arbitrary receiving group to which the data is to be transmitted, are
5 included in the data,

wherein in the second transmission mode, the group destination assignment information and the group specifying information are included in the data, and

10 wherein in the third transmission mode, the group destination assignment information is included in the data.

10. A transmitter for use in a digital communication system wherein data is structured to be in a predetermined format and to be transmitted to a plurality of receivers, said
15 transmitter comprises:

data structuring means for structuring data to be transmitted in one of a first data transmission mode, a second data transmission mode and a third data transmission mode,

20 wherein in the first data transmission mode, group destination assignment information directing which transmission mode is used to transmit the data, group specifying information for specifying a receiving group of receiving groups to which the data is to be transmitted, and
25 in-group identification information for identifying a

receiver in an arbitrary receiving group to which the data is to be transmitted, are included in the data,

wherein in the second data transmission mode, the group destination assignment information and the group specifying
5 information are included in the data, and

wherein in the third data transmission mode, the group destination assignment information is included in the data.